

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference BP108687	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/FI 2004/000212	International filing date (day/month/year) 07.04.2004	Priority date (day/month/year) 10.04.2003
International Patent Classification (IPC) or national classification and IPC G03G 5/00, G03G 7/00, B41M 5/00, B41M 7/00, D21H 19/32		
Applicant Finnish Chemicals Oy et al		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☐ (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/> Box No. VIII	Certain observations on the international application

Date of submission of the demand 27.09.2004	Date of completion of this report 10.02.2005
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer Bengt Christensson/MP Telephone No. +46 8 782 25 00

Form PCT/IPEA/409 (cover sheet) (January 2004)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI 2004/000212

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages* _____ as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	<u>1-9</u>	YES
	Claims	_____	NO
Inventive step (IS)	Claims	<u>1-9</u>	YES
	Claims	_____	NO
Industrial applicability (IA)	Claims	<u>1-9</u>	YES
	Claims	_____	NO

2. Citations and explanations (Rule 70.7)**The invention**

The present invention concerns a method for using a polymer coated paper or board as a printing substrate. The invention also concerns the printed product and the use of a coating on paper or board.

The object of the invention is a technique allowing repeated use of the printing substrate as such. It should be possible to remove the print from the printing surface by simple means without damaging the surface.

The aim is met in that the substrate has a surface of polysiloxane. The substrate is repeatedly used by removing printing ink with a solvent from the surface and by subsequently reprinting the surface that has been cleaned of printing ink.

Cited document

D1) US3250614, A1

Methods and materials for removing sensitizing dyes from electrophotographic prints are already known from D1 (column 1, lines 11-16). The purpose of this invention is to remove the dyes without damaging the image material (column 1, lines 62-65). An electrophotographic element consists of a conductive material and a nonconductive material such as

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

paper or wood. There is also a photoconductive layer covering the nonconductive material. The photoconductive layer comprises a resinous binder such as a silicone resin (column 2, lines 43-57). According to example 3 (column 4, lines 22-39), a xerographic print is made by depositing toner material onto a photoconductive material. Acetone removes the print completely, without damaging the image material or coating.

Analysis

D1 is cited in the International Search Report as a document of particular relevance and is now considered to show the closest background art. The reason for this review is that claim 1 specifies that the printing ink from the surface already printed is removed.

These features are not revealed in D1. According to D1, the dyes are selectively removed while leaving the print or image intact. Consequently, the materials and methods in D1 do not anticipate the technique of claim 1.

The method for a polymer-coated paper or board according to claim 1 is considered to give rise to an unexpected technical effect, i.e. removal of ink between the service cycles by washing with a solvent, without any other operations. Thus, this claim is not considered to describe a technique that is obvious to a person skilled in the art.

Claims 6, 9

Independent claims 6, 9 reveal the same technique as that of claim 1.

Conclusion

In accordance with the arguments stated above, the invention in claims 1-9 is novel, considered to involve an inventive step and has industrial applicability.

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The description

The content of the introductory part of the description (p 1, lines 6-9) does not agree with that of the title and the claims.

The claims

In claim 1, the phrase "a substrate" is mentioned twice. By this wording, the claim describes two different substrates. However, on the basis of the description, the claim is interpreted as if only one substrate is described.